

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method for decoding a bitstream comprising the steps of:

(A) receiving a first bitstream, wherein said first bitstream comprises an intra-only frame picture ~~stream encoded~~
5 bitstream comprising alternating macroblock rows, with each row containing data for a plurality of vertical lines from a single respective field;

(B) generating a first field picture and a second field picture in response to said first bitstream, wherein said first
10 field picture comprises macroblock rows containing the data for the plurality of vertical lines from a first field of the frame picture and said second field picture comprises macroblock rows containing the data for the plurality of vertical lines from a second field of the frame picture; and

15 (C) generating a second bitstream comprising said first field picture and said second field picture, ~~such that~~ wherein said second bitstream comprises an intra-only field picture encoded bitstream and is decodable as interlaced field pictures using an MPEG-2 compliant decoder.

2. (ORIGINAL) The method according to claim 1, wherein said generating steps further comprise:

copying a frame header from said first bitstream into a first field header portion of a first field buffer and a second field header portion of a second field buffer; and

modifying (i) a portion of said first field header portion to indicate a top field picture and (ii) a portion of said second field header portion to indicate a bottom field picture.

3. (PREVIOUSLY PRESENTED) The method according to claim 2, wherein said generating steps further comprise:

copying a plurality of said macroblock rows from said first bitstream to said first field buffer and said second field buffer, wherein said copying alternates between said first and said second buffers after each macroblock row.

4. (PREVIOUSLY PRESENTED) The method according to claim 3, wherein said generating steps further comprise:

adjusting a slice number of each macroblock row in said first field buffer and said second field buffer to increment consecutively.

5. (ORIGINAL) The method according to claim 1, wherein step (C) further comprises:

writing said first field picture and said second field picture consecutively to said second bitstream.

6. (ORIGINAL) The method according to claim 4, wherein step (C) comprises:

writing said first field buffer followed by said second field buffer to said second bitstream.

7. (ORIGINAL) The method according to claim 1, further comprising the step of:

presenting said second bitstream to a video decoder.

8. (ORIGINAL) The method according to claim 7, wherein said video decoder is configured to support a field picture mode.

9. (CURRENTLY AMENDED) The method according to claim 7, further comprising:

presenting even ~~and odd~~ field lines on a television monitor in response to said first field picture of said second
5 bitstream and odd field lines on said television in response to
said second field picture of said second bitstream.

10. (CURRENTLY AMENDED) An apparatus comprising:

means for receiving a first bitstream, wherein said first bitstream comprises an intra-only frame picture ~~stream~~ encoded
bitstream comprising alternating macroblock rows, with each row

5 containing data for a plurality of vertical lines from a single respective field;

means for generating a first field picture and a second field picture in response to said first bitstream, wherein said first field picture comprises macroblock rows containing the data for the plurality of vertical lines from a first field of the frame picture and said second field picture comprises macroblock rows containing the data for the plurality of vertical lines from a second field of the frame picture; and

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means for generating a second bitstream comprising said first field picture and said second field picture, ~~such that~~ wherein said second bitstream comprises an intra-only field picture encoded bitstream and is decodable as interlaced field pictures using an MPEG-2 compliant decoder.

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11. (CURRENTLY AMENDED) An apparatus comprising:

a circuit configured to

(i) receive a first bitstream, wherein said first bitstream comprises an intra-only frame picture ~~stream~~ encoded bitstream comprising alternating macroblock rows, with each row containing data for a plurality of vertical lines from a single respective field,

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(ii) generate a first field picture and a second field picture in response to said first bitstream, wherein said

10 first field picture comprises macroblock rows containing the data
for the plurality of vertical lines from a first field of the frame
picture and said second field picture comprises macroblock rows
15 containing the data for the plurality of vertical lines from a
second field of the frame picture, and

(iii) generate a second bitstream comprising said
first field picture and said second field picture, ~~such that~~
20 wherein said second bitstream comprises an intra-only field picture
encoded bitstream and is decodable as interlaced field pictures
using an MPEG-2 compliant decoder.

12. (ORIGINAL) The apparatus according to claim 11,
wherein said circuit comprises:

a first field buffer;

a second field buffer; and

5 a transform circuit configured to (i) copy a frame header
from said first bitstream into a first field header portion of said
first field buffer and a second field header portion of said second
field buffer.

13. (ORIGINAL) The apparatus according to claim 12,
wherein said transform circuit is further configured to:

modify (i) a portion of said first field header portion
to indicate a top field picture and (ii) a portion of said second
5 field header portion to indicate a bottom field picture.

14. (PREVIOUSLY PRESENTED) The apparatus according to
claim 12, wherein said transform circuit is further configured to:

copy a plurality of said macroblock rows from said first
bitstream to said first field buffer and said second field buffer,
5 wherein said copying alternates between said first and said second
buffers after each macroblock row.

15. (PREVIOUSLY PRESENTED) The apparatus according to
claim 14, wherein said transform circuit is further configured to:

adjust a slice number of each macroblock row in said
first field buffer and said second field buffer to increment
5 consecutively.

16. (ORIGINAL) The apparatus according to claim 12,
wherein said transform circuit is further configured to:

write an output from said first field buffer and an
output from said second field buffer consecutively to said second
5 bitstream.

17. (ORIGINAL) The apparatus according to claim 11, further comprising:

a video decoder circuit configured to receive said second bitstream.

18. (ORIGINAL) The apparatus according to claim 17, wherein said video decoder circuit is further configured to support a field picture mode.

19. (CURRENTLY AMENDED) The apparatus according to claim 17, wherein said video decoder circuit is further configured to present even ~~and odd~~ field lines on a television monitor in response to said first field picture of said second bitstream and
5 odd field lines on said television in response to said second field picture of said second bitstream.

20. (ORIGINAL) The apparatus according to claim 11, wherein said first bitstream comprises an intra-only MPEG-2 frame picture stream.

21. (PREVIOUSLY PRESENTED) The apparatus according to claim 16, wherein said transform circuit is further configured to:
write sequence-related information from said first bitstream to said second bitstream.

22. (PREVIOUSLY PRESENTED) The apparatus according to claim 21, wherein said transform circuit modifies one or more portions of sequence-related headers from said first bitstream prior to output in said second bitstream.